



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10

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OFFICE OF
WATER AND WATERSHEDS

November 21, 2013

Kevin Freeman
Project Coordinator
ARCADIS
695 N. Legacy Ridge Drive, Suite 200
Liberty Lake, WA 99019

Re: Comments Regarding Residential Well Sampling Report – Provision of Water
Administrative Order on Consent (“Consent Order”)
Docket No. SDWA-10-2013-0080
Yakima Valley Dairies, Washington

Dear Mr. Freeman:

The U.S. Environmental Protection Agency, Region 10 (“EPA”) has completed its review of the Residential Well Sampling Report – Provision of Water, dated October 10, 2013. Based on our review, EPA has the following comments regarding this report:

General Comments

1. Add a brief executive summary at the beginning of the report that includes this table in the body of the report:

	Number of Residences	Reference
Identified as being located within the area of interest		Table 1
Assessed either by Hach test strip or lab analysis for nitrate		
Hach test strip indicated water under 5 mg/L nitrate		Table 3
Water was sampled and sent to a lab for analysis		Tables 6 & 7
Were over the MCL by lab analysis		Table 7
Were under the MCL by lab analysis		Table 6
Were not sampled because the resident refused access		Table 10
Were not sampled because there was no one at home		Table 10
Were not sampled because the residence was vacant		Table 10
Already had reverse osmosis units installed		Table 2
Were less than the MCL, either by Hach test strip or lab analysis		
Were offered reverse osmosis treatment systems at no charge to the resident		Table 8

Were offered maintenance of existing reverse osmosis units at no charge		Table 9
Accepted the offer of a reverse osmosis unit		Table 8
Accepted the offer of maintenance of an existing reverse osmosis unit		Table 9

Fill in the numbers of residences and double-check the references listed in the third column to ensure they are correct.

2. Include the following sentence in the executive summary: “Out of the X residences that were assessed for nitrate (either by Hach test strip, laboratory analysis, or the presence of an existing reverse osmosis unit, Y percent exceeded the maximum contaminant level (MCL) of 10 mg/L.” [Note: from the table above, X would be equal to the number of residences that were assessed either by Hach test strip or lab analysis for nitrate, plus the number of residences that already had reverse osmosis units installed. Y would be equal to the number of residences that were over the MCL by lab analysis plus the number of residences that already had reverse osmosis units installed, divided by X).
34. Add a column on the far left of each table that assigns a sequential line number to allow for easy counting of the residences in each table (1,2,3, etc.).
4. Figures 1 and 2 do not present sufficient information about this sampling event. There are additional figures and GIS data layers on the CD submitted with the hard copy of the report; however, not all of these GIS layers are geo-referenced and the maps on the CD need to be plotted. Add a third map to the report (“Figure 3”) that uses the aerial photo base map presented in Figure 2 and illustrates the residential sample locations and analytical results as follows: indicate residences with nitrate concentration less than 10 mg/L with a small solid yellow circle, residences with nitrate concentrations between 10 and 20 mg/L with a medium-sized solid red circle, and residences with nitrate concentrations greater than or equal to 20 mg/L with a large solid red circle. Indicate residences that have an existing reverse osmosis unit with a medium-sized solid orange circle and residences that were not assessed with a small unfilled circle. Clearly label this map as “Confidential – contains personally identifiable information.” Handle the map appropriately. Identify Figure 3 in the table of contents and incorporate a discussion of Figure 3 in the body of the report.
5. Add a new appendix to the report that provides all of the model letters that were used to communicate with the residents (e.g., a generic offer to sample letter, letter offering to install a reverse osmosis unit, etc.)
6. EPA’s assumption is that the Excel data file provided on the CD represents a complete set of data. Add a discussion in the report text that states that the data in the CD is a complete set of the data.

Specific Comments

1. Signatures page. Include dates next to the signatures.
2. Section 2.2, Residential Well Sampling. In the second sentence, add the number of residential properties that are owned by the dairies which were sampled. Correct the year in this sentence from 2012 to 2013.
34. Section 2.4.1, Field Quality Control Samples. State the number of field QC samples that were taken and explain whether the results met the criteria as specified in the QAPP.
4. Section 4, Data Validation and Usability. Instead of restating the QAPP, provide a summary of any findings from the data verification and validation process. Also, the report must state that field blanks were used for the majority of the MS/MSD analyses.
5. Figure 1 – Site Map.
 - a. The map is difficult to interpret because it is visually busy. Remove the quarter-section-related lines and numbers to improve clarity.
 - b. Change the “Approximate Boundary of Downgradient” label to “Approximate One Mile Downgradient Boundary.”
 - c. There are two blue lines on the map indicating the downgradient boundary, however only one line is defined in the legend. Define both blue lines in the legend or remove one from the map. This comment also applies to Figure 2.
6. Table 5 – Analytical Quality Control Sample Summary.
 - a. The field duplicate summary must include both the parent sample and field duplicate alongside it to facilitate comparison. Additionally, these results must be accompanied by the precision data (i.e., RPD).
 - b. There is a considerable degree of variability between some samples and their duplicates. This requires additional discussion in the body of the report.
7. Appendix A. There are several corrections on the Residential Well Sampling Records. In the future, when corrections are made on field documents, the portion to be corrected must be crossed-out with a single line and the initials of the person performing the correction must be included, along with the date the correction was made.
8. Appendix B. Why are no Case Narratives provided in any of the laboratory’s Analytical Reports? Provide the Case Narratives or explain in the text why they are not provided.

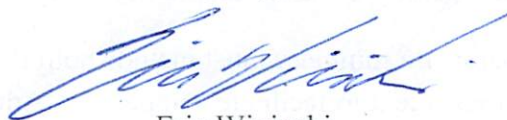
9. Appendix C

- a. In the Blank Contamination section of all of the Data Usability Summary Reports, the third paragraph is inconsistent with the QAPP. The QAPP states that field blanks will be collected each day as opposed to 1 in 10 samples. Clarify this discrepancy.
- b. In the tables presented in the Blank Contamination section and the Field Duplicate Sample Analysis section, the **Number of Collected Samples** column is inconsistent across the Data Usability Summary Reports. In some of the reports, this column provides a count of all of the samples collected. In other reports, this column provides a count of the samples collected excluding the Field QC samples (i.e., field blanks & field duplicates). Make this column consistent across all reports.
- c. In the Data Usability Summary Report for SWI0124, the duplicate pair listed in the table in the Field Duplicate Sample Analysis section is incorrect. Correct the text.

Pursuant to Paragraph 14.b. of the Consent Order, Respondents must revise the Residential Well Sampling Report – Provision of Water to fully address these comments. Respondents must submit a revised Residential Well Sampling Report – Provision of Water to EPA by December 20, 2013.

You may contact me at (206) 553-6904, or your legal counsel may contact Jennifer MacDonald at (206) 553-8311, if you have any questions regarding this letter.

Sincerely,



Eric Winiecki
EPA Project Coordinator
Office of Water and Watersheds

Enclosure

cc: Jennifer MacDonald
Rene Fuentes